

## **SYSTEM AND METHOD FOR COOLING OF NETWORK INTERFACE DEVICE**

### **ABSTRACT OF THE DISCLOSURE**

A network interface device (NID) for connecting a telecommunications line to a subscriber premises. The NID includes an enclosure that houses wiring, connectors, and active telecommunications devices. A cooling device, such as a fan, is used for cooling the active devices within the NID and is powered by a storage capacitor. The capacitor is charged by current from telecommunications signals on the telecommunications line using a power regulating circuit. The active devices within the NID generate heat, and the cooling device maintains a desired operating temperature within the NID. In one embodiment, the NID includes electronic components used for providing DSL service to the subscriber, and the lower frequency voice components of the telecommunications signals received at the NID are used for charging the capacitor. A microserver within the NID senses the current levels provided to the NID and to an active component module (e.g., DSL modem), and senses the electrical charge level at the storage capacitor. If current to the NID and DSL modem are insufficient, an alarm signal is generated. If the charge level at the storage capacitor is below a predetermined level, current from the telecommunications line is supplied to the capacitor.

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